

ABSTRACT OF THE DISCLOSURE

A method and a system are described for achieving a desired value for the magnitude of compression when compressing the information contained in a digitized fingerprint images. A lossy compression method is used that includes use of a compression parameter whose value may be varied to adjust the amount of compression actually achieved. Briefly summarized, the method comprises selecting a first value for the compression parameter and then performing a first compression of the information contained in a digitized fingerprint image using the first value for the compression parameter and using the lossy compression method, thereby producing a first set of compressed information. Next, a first value for the magnitude of compression is computed from the quantity of information that is contained in the digitized fingerprint image and also from the quantity of information that is contained in the first set of compressed information. Then a first pair of values is formed which first pair includes the first value for the magnitude of compression and the first value for the compression parameter. Interpolation is then performed, using the first pair of values, a second pair of values, and a first new pair of values which first new pair includes the desired value for the magnitude of compression and an as yet unknown first new value for the compression parameter. In this interpolation, a value for this first new value for the compression parameter is determined by computing its value from the remaining five values. Finally, a new compression of the fingerprint image information is performed using this first new value for the compression parameter. This produces a new set of compressed information that is compressed close to the desired value.